

## Draft Individual Review Form

Proposal number: 2000-F212-3

Short Proposal Title: Trout Toxicity Monitoring

**1a) Are the objectives and hypotheses clearly stated?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Partly.

Objectives are listed clearly on page 4.

The hypothesis is a method can be developed, per page 5, and the reader is referred to the Scope of Work (SOW) section for a description of the data needed. However, the SOW section seems to refer mainly to names of reference toxicants and a generic “contaminants of concern.” I could find no mention in the SOW section of quantities, study design, statistics, quantitative criteria for success for moving from one objective to the next, or for determining successful development of the method and an answer for the hypothesis.

**1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

No. The conceptual model includes text and a diagram. The causal interconnections among critical components of the ecosystem that indicate toxicity or among sequential objectives are not apparent to me. There is no discussion of how trout might be affected by stressors; how feasibility is made apparent; or how toxicants are identified, screened, or characterized spatially or temporally.

**1b2) Is the approach well designed and appropriate for meeting the objectives of the project?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Partly. The overall steps are described and types of tests are named, e.g., RTED or TIE. However, the experimental design, methods, data analysis and interpretation are not clearly described or integrated to show how the results would come together and show whether or not the method has been successfully developed or toxicity identified. Further, there are no off-ramps in case a step proves end-point. Further, I saw no discussion of how applicable results for trout embryos from an unspecified source are to wild salmonid responses to potential toxicants.

**1c1) Has the applicant justified the selection of research, pilot or demonstration project, or a full-scale implementation project?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Yes. Research is called for on this topic due to the uncertainty from limited testing, indications of salmonid toxicity in the Central Valley, and identification of techniques that could prove useful.

**1c2) Is the project likely to generate information that can be used to inform future decision making?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Yes. Whether this approach is useful should be informative to those struggling with the contaminants problem. It may generate more useful information on streams where toxicity has been observed. It uses a salmonid and standard types of tests. However, this is a research project, and by its very nature the results and their utility are unpredictable.

**2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Partly. No monitoring is described that relates to assessing the outcome of the project. There is no text on what data or statistics indicate that the project achieves its goal or objectives. They do mention QA monitoring by incorporating references and describe the overall steps or sequential objectives.

**2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Partly. Maps are provided and standard procedures are referenced but not described. Data collection, management, and analyses would obviously occur but are not described. It seems implied that the lab tests would be done at AQUA-Science facilities but it is not clear, nor is the role of UCD clear.

**3) Is the proposed work likely to be technically feasible?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Partly. They can probably determine whether the approach is useful. They propose developments off of standard techniques with which they are familiar, and are not breaking entirely new ground. Whether they can determine toxicity and causative agents for all locations remains to be seen.

**4) Is the proposed project team qualified to efficiently and effectively implement the proposed project?**

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Yes. They are knowledgeable and experienced with the techniques; however, there is no schedule of tasks beyond a brief list of due dates for products, and no discussion of end-points/off-ramps, contingencies, or major assumptions about progress. Test facilities are not described. There is little discussion of the project

roles and responsibilities regarding scope, schedule, budget, and quality, of the Regional Board, AQUA-Science, and UCD and SRWP. It is implied that all tests will be done by AQUA-Science but it is not explicit.

**Miscellaneous comments**

[Note: in the electronic version, this will be an expandable field]

<b>Overall Evaluation Summary Rating</b>  <input type="checkbox"/> Excellent <input type="checkbox"/> Very Good <input checked="" type="checkbox"/> <b>Good</b> <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<b>Provide a brief explanation of your summary rating</b>  Quality proposal with qualified people but short on various key descriptions as noted above.
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